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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of:

**DAVID C. AUSTIN**

Serial No. **10/689,560**

Filing Date: **October 20, 2003**

For: **TIDAL VERTICAL FLOW  
WASTEWATER TREATMENT SYSTEM  
AND METHOD**

Art Unit: **1723**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

**TRANSMITTAL OF INFORMATION DISCLOSURE STATEMENT**

In compliance with 37 C.F.R. §1.97(b), it is respectfully requested that the Information Disclosure Statement (Form PTO/SB/08A) attached hereto be entered and the references listed thereon be considered by the Examiner and made of record. Copies of the listed references are enclosed.

Respectfully submitted,

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Agent for Applicant

**CERTIFICATE OF MAILING**

I hereby certify that the foregoing is being deposited with the United States Postal Service as first class mail in an envelope addressed to the Commissioner of Patents, P.O. Box 1450, Alexandria, VA 22313-1450, this 23<sup>rd</sup> day of September, 2004.

  
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Edward Bradley



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<b>Substitute for form 1449A/PTO</b>  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (use as many sheets as necessary)				<b>Complete If Known</b>	
				Application Number	10/689,560
				Filing Date	10/20/2003
				First Named Inventor	David C. Austin
				Group Art Unit	1723
				Examiner Name	
Sheet	1	of	5	Attorney Docket Number	94012

U.S. PATENT DOCUMENTS						
Examiner Initials*	Cite No. <sup>1</sup>	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number	Kind Code <sup>2</sup> (if known)			
	AA	681,884		Monjeau	Sept. 03, 1901	
	AB	2,306,027		Swaney	Dec. 22, 1942	
	AC	2,486,512		Armstrong	Nov. 01, 1949	
	AD	2,822,329		Griffith	Feb. 04, 1958	
	AE	3,770,623		Seidel	Nov. 06, 1973	
	AF	3,925,206		Dea	Dec. 09, 1975	
	AG	4,039,451		Smith	Aug. 02, 1977	
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	AI	4,169,050		Serfling et al.	Sep. 25, 1979	
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	AK	4,267,038		Thompson	May 12, 1981	
	AL	4,331,538		Kickuth	May 25, 1982	
	AM	4,333,837		Plósz et al.	June 08, 1982	
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	AO	4,415,450		Wolverton	Nov. 15, 1983	
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	AS	4,746,435		Onishi et al.	May 24, 1988	
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	AU	4,839,051		Higa	June 13, 1989	
	AV	4,872,985		Dinges	Oct. 10, 1989	
	AW	4,895,645		Zorich, Jr.	Jan. 23, 1990	
	AX	4,904,386		Kickuth	Feb. 27, 1990	
	AY	4,959,084		Wolverton et al.	Sep. 25, 1990	
	AZ	5,078,882		Northrop	Jan. 07, 1992	

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\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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	BA	5,078,884		Mulder	Jan. 07, 1992	
	BB	5,087,353		Todd et al.	Feb. 11, 1992	
	BC	5,126,050		Irvine et al.	June 30, 1992	
	BD	5,137,625		Wolverton	Aug. 11, 1992	
	BE	5,174,897		Wengrzynek	Dec. 29, 1992	
	BF	5,259,959		Mulder	Nov. 09, 1993	
	BG	5,337,516		Hondulas	Aug. 16, 1994	
	BH	5,389,257		Todd et al.	Feb. 14, 1995	
	BI	5,393,426		Raskin et al.	Feb. 28, 1995	
	BJ	5,486,291		Todd et al.	Jan. 23, 1996	
	BK	5,518,618		Mulder et al.	May 21, 1996	
	BL	5,618,413		Todd et al.	Apr. 08, 1997	
	BM	5,733,453		DeBusk	Mar. 31, 1998	
	BN	5,766,474		Smith et al.	June 16, 1998	
	BO	5,863,433		Behrends	Jan. 26, 1999	
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	BY	6,159,371		Dufay	Dec. 12, 2000	
	BZ	6,183,642		Heijnen et al.	Feb. 06, 2001	

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	CA	6,200,469		Wallace	Mar. 13, 2001	
	CB	6,277,274		Coffman	Aug. 21, 2001	
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	CD	6,447,681		Carlberg et al.	Sep. 10, 2002	
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	CG	6,645,374		Cote et al.	Nov. 11, 2003	
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FOREIGN PATENT DOCUMENTS								
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		Office	Number <sup>4</sup>	Kind Code <sup>5</sup> (If known)				
	CI	DE	1916044		Compagnie d'Etudes et de Recherches des Services Operationnels	Nov. 06, 1969		
	CJ	DE	3941211		Harf, Fred	June 20, 1991		
	CK	SU	1346588		Water Protection In	Oct. 23, 1987		
	CL	GB	2 182 651		Logstrup, Jorgen	May 20, 1987		
	CM	JP	58-70891		Toua Kensetsu Kogyo KK	Apr. 27, 1983		
	CN	DE	DD 300 015 A7		Univ. Dresden Tech.	May 21, 1992		

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OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS			
Examiner Initials	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or county where published.	T <sup>2</sup>
	CO	Solar Aqua Systems, Inc., Marketing brochure, 1978.	
	CP	REED, Sherwood and BASTIAN, Robert, "Aquaculture Systems for Wastewater Treatment: An Engineering Assessment," U.S. Environmental Protection Agency Office of Water Program Operations Municipal Construction Division, 132 pages, June 1980.	
	CQ	JEWELL, W. J. et al., "Wastewater Treatment with Plants in Nutrient Films," U.S. Environmental Protection Agency, EPA-600/S2-83-067, pps. 1-5, October 1983.	
	CR	JEWELL, William J., "Anaerobic Sewage Treatment," Environmental Science & Technology, Vol. 21, pps. 14-21, January 1987.	
	CS	ZHU, T. et al., "Phosphorus Sorption and Chemical Characteristics of Lightweight Aggregates (LWA) Potential Filter Media in Treatment Wetlands," Wat. Sci. Tech., Vol. 35, No. 5, pps. 103-108, 1997.	
	CT	AUSTIN, David, "Final Report on The South Burlington, Vermont Advanced Ecologically Engineered System (AEES) for Wastewater Treatment," U.S. Environmental Protection Agency, pps. i-M2, March 4, 2000.	
	CU	SUN et al., "Treatment of Agricultural Wastewater in a Combined Tidal Flow-Downflow Reed Bed System," Water Science Technology, Vol. 40, No. 3, pps. 139-146, 1999.	
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	CW	McBRIDE, Graham B. and TANNER, Chris C., "Modelling Biofilm Nitrogen Transformations in Constructed Wetland Mesocosms with Fluctuating Water Levels," Ecological Engineering 14, pp. 93-106, Elsevier Science B.V., 2000.	

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	CX	NGUYEN, Long M., "Organic Matter Composition, Microbial Biomass and Microbial Activity in Gravel-Bed Constructed Wetlands Treating Farm Dairy Wastewaters," Ecological Engineering 16, pp. 199-221, Elsevier Science B.V., 2000.	
	CY	TANNER, Chris C. et al., "Effect of Water Level Fluctuation on Nitrogen Removal from Constructed Wetland Mesocosms," Ecological Engineering 12, pp. 67-92, Elsevier Science B.V., 1999.	
	CZ	VON FELDE, Katrin and KUNST, Sabine, "N- and Cod-Removal in Vertical-Flow Systems," Water Science Technology, Vol. 35, No. 5, pp. 79-85, Pergamon Press, Oxford, 1997.	
	DA	GREEN, Michal et al., "Investigation of Alternative Method for Nitrification in Constructed Wetlands," Water Science Technology, Vol. 35, No. 5, pp. 63-70, Pergamon Press, Oxford, 1997.	
	DB	LABER, Johannes et al., "Two Strategies for Advanced Nitrogen Elimination in Vertical Flow Constructed Wetlands," Water Science Technology, Vol. 35, No. 5, pp. 71-77, Pergamon Press, Oxford, 1997.	
	DC	WATSON, J.T. and DANZIG, A.J., "Pilot-Scale Nitrification Studies Using Vertical-Flow and Shallow Horizontal-Flow Constructed Wetland Cells," Constructed Wetlands for Water Quality Improvement, pp. 301-313, CRC Press, Inc., 1993.	
	DD	SWOBODA-COLBERG, Norbert et al., "Constructed Vertical Flow Aerated Wetlands," U.S. Department of Commerce Final Report, pp. 1-54, December 1994.	

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